## **AMENDMENTS TO THE CLAIMS**

Please cancel claims 1 and 15, amend claims 2 - 14 and 16 - 18, and add claims 20 - 45 as listed in the following claims:

- 1. (Cancelled)
- 2. (Currently amended) A compound method according to claim 1 16, wherein m is 0, 1 or 2 and n is 3 or 4.
- 3. (Currently amended) A compound method according to claim  $\frac{16}{16}$ , wherein X is carbonyl or the group of formula II in which  $R_5$  is H.
- 4. (Currently amended) A compound method according to claim 1 16, wherein Y is methylene.
- 5. (Currently amended) A compound method according to claim  $\frac{16}{10}$ , wherein Z is an alkylene chain containing  $\frac{2}{100}$ ,  $\frac{3}{100}$  or  $\frac{4}{100}$  carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms.
- 6. (Currently amended) A compound method according to claim  $\frac{16}{16}$ , wherein Z is an alkylene chain containing  $\frac{2}{16}$ , or  $\frac{4}{16}$  carbon atoms optionally substituted by one or more methyl groups.
- 7. (Currently amended) A compound method according to claim 4 16, wherein R is phenyl substituted by one or two chloro substituents or R is naphthyl.
- 8. (Currently amended) A compound method according to claim 4 16, wherein R is 3 chlorophenyl, 3,4 dichlorophenyl or 2 naphthyl 3-chlorophenyl; 3,4-dichlorophenyl; or 2-naphthyl.

- 9. (Currently amended) A compound method according to claim  $\frac{1}{16}$ , wherein  $R_1$  is an alkyl group containing 1 to 3 carbon atoms or is benzyl, and  $R_2$  is an alkyl group containing 1 to 3 carbon atoms.
- 10. (Currently amended) A compound method according to claim  $\pm$  16, wherein  $R_1$  and  $R_2$  are both methyl or ethyl or  $R_1$  is benzyl and  $R_2$  is methyl.
- 11. (Currently amended) A compound method of treating drug misuse or other addictive disorders comprising administering a therapeutically effective amount of a compound of formula III

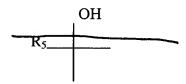
$$R_3$$
  $X-Y-S(O)m-Z-NR_1R_2$   $R_4$  (CH<sub>2</sub>)n

and pharmaceutically acceptable salts thereof wherein:

m is 0, 1 or 2;

n is 2, 3, 4 or 5;

X is carbonyl or a group of formula II



and wherein  $R_5$  is H or an alkyl group containing 1 to 4 carbon atoms;

Y is an alkylene chain containing 1 or 2 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

Z is an alkylene chain containing 2 to 5 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

 $R_1$  and  $R_2$ , which are the same or different, are H, a straight or branched chain alkyl group containing 1 to 4 carbon atoms, an arylalkyl group in which the alkyl group contains 1 to 3 carbon atoms, provided that when  $R_1$  is benzyl,  $R_2$  is H or methyl; and

R<sub>3</sub> is halo, and R<sub>4</sub> is H or halo, or R<sub>3</sub> and R<sub>4</sub> together with the carbon atoms to which they are attached form a fused benzene ring;

to a patient in need thereof.

- 12. (Currently amended) A compound of formula III method according to claim 11, wherein  $R3 R_3$  is chloro and R1 is H, R3 and R4 R3 and R4 being both chloro or R3 and R4 R3 and R4 together with the carbon atoms to which they are attached forming a fused benzene ring.
- 13. (Currently amended) A compound of formula III method according to claim 11, wherein R3  $R_3$  is chloro situated in the 3-substitution position on the phenyl ring and  $R_4$  is H,  $R_3$  and  $R_4$  being both chloro and situated in the 3- and 4-substitution positions on the phenyl ring respectively, or  $R_3$  and  $R_4$  together with the phenyl ring to which they are attached forming a 2-naphthyl group.
- 14. (Currently amended) A compound method according to claim 4 16, wherein the compound of formula I is selected from the group consisting of:
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylthio] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylsulphinyl] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylsulphonyl] ethanone;
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (diethylamino) ethylthio] ethanone;
- 2-[2-(N-benzyl-N-methylamino) ethylthio]-1-[1-(3,4-dichlorophenyl)cyclobutyl]-ethanone;
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylthio] ethanol;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylthio] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylsulphonyl] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylthio] ethanol;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino)-2-methylpropylthio]-ethanone;

2-[2-(dimethylamino) ethylthio]-1-(1-(2-naphthyl) cyclobutyl] ethanone;

1-[1-(3-chlorophenyl) cyclobutyl]-2-[3-(dimethylamino) propylthio] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[4- (dimethyl-amino) butylthio] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dipropyl-amino) propylthio] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino)-2-methylpropylthio] ethanol;

1-[1-(3,4-dichlorophenyl) cyclopentyl]-2-[3- (dimethylamino) propylthio] ethanone; and

pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers.

## 15. (Cancelled)

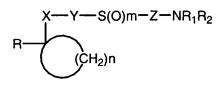
16. (Currently amended) A method of treating drug misuse or other addictive disorders which comprises the comprising administering administration of a therapeutically effective amount of a compound of formula I as defined in any one of claims 1 to 14 to a patient in need thereof.

$$X-Y-S(O)m-Z-NR_1R_2$$
 $R-(CH_2)n$ 

and pharmaceutically acceptable salts thereof in which

m is 0, 1 or 2;
n is 2, 3, 4 or 5;
X is carbonyl or a group of formula II
$R_5$ II
in which R <sub>5</sub> is H or an alkyl group containing 1 to 4 carbon atoms;
Y is an alkylene chain containing 1 or 2 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;
Z is an alkylene chain containing 2 to 5 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;
R is phenyl optionally substituted by one or more halo substituents or R is naphthyl; and
$R_1$ and $R_2$ which are the same or different, are H, a straight or branched chain alkyl group containing 1 to 4 carbon atoms, an arylalkyl group in which the alkyl group contains 1 to 3 carbon atoms, provided that when $R_1$ is benzyl, $R_2$ is H or methyl;
to a patient in need thereof.
17 (Currently amended). A method of reducing crayings to food or an addictive

substance in a mammal comprising administering an effective amount of a compound of formula I as defined in any one of claims 1 to 14 to a mammal in need thereof.



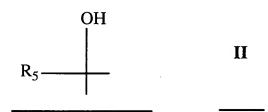
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and pharmaceutically acceptable salts thereof in which

m is 0, 1 or 2;

n is 2, 3, 4 or 5;

X is carbonyl or a group of formula II



in which R<sub>5</sub> is H or an alkyl group containing 1 to 4 carbon atoms;

Y is an alkylene chain containing 1 or 2 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

Z is an alkylene chain containing 2 to 5 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

R is phenyl optionally substituted by one or more halo substituents or R is naphthyl; and

R<sub>1</sub> and R<sub>2</sub> which are the same or different, are H, a straight or branched chain alkyl group containing 1 to 4 carbon atoms, an arylalkyl group in which the alkyl group contains 1 to 3 carbon atoms, provided that when R<sub>1</sub> is benzyl, R<sub>2</sub> is H or methyl;

to the mammal in need thereof.

- 18. (Currently amended) A method <u>according to as claimed in claim 17</u>, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 19. (Cancelled)
- 20. (New) A method according to claim 17, wherein m is 0, 1 or 2 and n is 3 or 4.
- 21. (New) A method according to claim 17, wherein X is carbonyl or the group of formula II in which  $R_5$  is H.
- 22. (New) A method according to claim 17, wherein Y is methylene.
- 23. (New) A method according to claim 17, wherein Z is an alkylene chain containing 2 to 4 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms.
- 24. (New) A method according to claim 17, wherein Z is an alkylene chain containing 2 to 4 carbon atoms optionally substituted by one or more methyl groups.
- 25. (New) A method according to claim 17, wherein R is phenyl substituted by one or two chloro substituents or R is naphthyl.
- 26. (New) A method according to claim 17, wherein R is 3-chlorophenyl; 3,4-dichlorophenyl; or 2-naphthyl.
- 27. (New) A method according to claim 17, wherein  $R_1$  is an alkyl group containing 1 to 3 carbon atoms or is benzyl, and  $R_2$  is an alkyl group containing 1 to 3 carbon atoms.
- 28. (New) A method according to claim 17, wherein  $R_1$  and  $R_2$  are both methyl or ethyl or  $R_1$  is benzyl and  $R_2$  is methyl.

29. (New) A method of reducing cravings to food or an addictive substance in a mammal comprising administering an effective amount of a compound of formula III

$$R_3$$
  $X-Y-S(O)m-Z-NR_1R_2$   $R_4$   $(CH_2)n$ 

and pharmaceutically acceptable salts thereof wherein:

m is 0, 1 or 2;

n is 2, 3, 4 or 5;

X is carbonyl or a group of formula II

$$R_5$$
 II

and wherein R<sub>5</sub> is H or an alkyl group containing 1 to 4 carbon atoms;

Y is an alkylene chain containing 1 or 2 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

Z is an alkylene chain containing 2 to 5 carbon atoms optionally substituted by one or more alkyl groups containing 1 to 3 carbon atoms;

 $R_1$  and  $R_2$ , which are the same or different, are H, a straight or branched chain alkyl group containing 1 to 4 carbon atoms, an arylalkyl group in which the alkyl group contains 1 to 3 carbon atoms, provided that when  $R_1$  is benzyl,  $R_2$  is H or methyl; and

R<sub>3</sub> is halo, and R<sub>4</sub> is H or halo, or R<sub>3</sub> and R<sub>4</sub> together with the carbon atoms to which they are attached form a fused benzene ring;

to the mammal in need thereof.

- 30. (New) A method according to claim 29, wherein  $R_3$  is chloro and  $R_1$  is H,  $R_3$  and  $R_4$  being both chloro or  $R_3$  and  $R_4$  together with the carbon atoms to which they are attached forming a fused benzene ring.
- 31. (New) A method according to claim 29, wherein  $R_3$  is chloro situated in the 3-substitution position on the phenyl ring and  $R_4$  is H,  $R_3$  and  $R_4$  being both chloro and situated in the 3- and 4-substitution positions on the phenyl ring respectively, or  $R_3$  and  $R_4$  together with the phenyl ring to which they are attached forming a 2-naphthyl group.
- 32. (New) A method according to claim 17, wherein the compound of formula I is selected from the group consisting of:
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylthio] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylsulphinyl] ethanone:
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylsulphonyl] ethanone;
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (diethylamino) ethylthio] ethanone;
- 2-[2-(N-benzyl-N-methylamino) ethylthio]-1- [1-(3,4-dichlorophenyl)cyclobutyl]-ethanone;
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[2- (dimethylamino) ethylthio] ethanol;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylthio] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylsulphonyl] ethanone;
  - 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino) propylthio] ethanol;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino)-2-methylpropylthio]-ethanone;
  - 2-[2-(dimethylamino) ethylthio]-1-(1-(2-naphthyl) cyclobutyl] ethanone;
  - 1-[1-(3-chlorophenyl) cyclobutyl]-2-[3-(dimethylamino) propylthio] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[4- (dimethyl-amino) butylthio] ethanone;
- 1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dipropyl-amino) propylthio] ethanone;

1-[1-(3,4-dichlorophenyl) cyclobutyl]-2-[3- (dimethylamino)-2-methylpropylthio] ethanol;

1-[1-(3,4-dichlorophenyl) cyclopentyl]-2-[3- (dimethylamino) propylthio] ethanone; and

pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers.

- 33. (New) A method according to claim 20, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 34. (New) A method according to claim 21, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 35. (New) A method according to claim 22, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 36. (New) A method according to claim 23, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 37. (New) A method according to claim 24, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 38. (New) A method according to claim 25, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 39. (New) A method according to claim 26, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 40. (New) A method according to claim 27, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 41. (New) A method according to claim 28, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.

- 42. (New) A method according to claim 29, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 43. (New) A method according to claim 30, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 44. (New) A method according to claim 31, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.
- 45. (New) A method according to claim 32, wherein the addictive substance is cocaine, amphetamine, nicotine, opiates, tobacco, alcohol or ecstasy.